

**REMARKS**

Applicants' attorney wishes to thank the Examiner for the courteous and helpful interview of September 13, 2006 during which claim amendments and the prior art were discussed.

Applicants have amended Claim 21 in order to remove the rejection based on 35 U.S.C. 112, second paragraph and to clarify the present invention. Only Claim 21 and Claims 14 and 15 dependent therefrom are being prosecuted herein.

As now amended, Claim 21 is to a surface treating apparatus that has a treating chamber connected to an evacuating system, and a melting/evaporating source for melting and evaporating a wire-shaped vapor-depositing material containing a vapor deposition controlling gas, disposed in the treating chamber. A rotatable cage-shaped, work retaining member is disposed in the treating chamber, and spaced above the melting/evaporating source, for retaining a work on which the vapor depositing material is deposited, and a supply of wire-shaped vapor-depositing material containing a predetermined amount of the vapor deposition controlling gas is wound about a feed reel. A thermal resistant protective tube is disposed between the feed reel and the melting/evaporating source. The feed reel is mounted so as to rotate about a substantially vertical rotational axis and is horizontally disposed in the treating chamber below the melting/evaporating source, such that, as the wire-shaped vapor-depositing material containing the vapor deposition controlling gas is supplied from the feed reel to the melting/evaporating source, the wire-shaped vapor-depositing material containing the vapor deposition controlling gas has a horizontally disposed lower portion, a vertically disposed intermediate portion and a horizontally disposed upper portion. The wire-shaped vapor-

depositing material containing the vapor deposition controlling gas is protected by the thermal resistant protective tube between the feed reel and the melting/evaporating source. Such a surface treating apparatus arrangement is not taught or suggested in the prior art.

In the office action, Claims 21, 14 and 15 were rejected under 35 U.S.C. 103(a) in view of a combination of Steube (U.S. 3,926,147) and Satoh (JP-60-92466), and further in view of those two references in combination with Welsh (3,097,113). Reconsideration and removal of these rejections are respectfully requested in view of the present amendment to Claim 21, and the following remarks.

In the office action, it is alleged that Steube (Fig. 4) shows an apparatus where a treating chamber has a heater for melting and evaporating a wire (including an aluminum wire) and a rotatable cage shaped work retaining member disposed in the treating chamber. It is further alleged that a feed reel (120) is provided with a supply of wire and that the feed reel is horizontally disposed. It is then alleged that the direction of winding is in a horizontal direction and that the direction of feeding of the wire is vertical, and, as such, the direction of winding is perpendicular to the direction of feeding of the wire to the heating element. Satoh is cited merely to show that it would be obvious to use a hydrogen-containing aluminum wire in place of an aluminum wire in the Steube apparatus.

However, in the present claimed arrangement of surface treating apparatus, as shown in the drawings and as described at page 12, lines 4 to 9 of the present specification, the feed reel for the wire is mounted so as to rotate about a substantially vertical rotational axis and, as wire is supplied from the feed reel, the wire has a horizontally disposed lower portion, a vertically disposed

intermediate portion and a horizontally disposed upper portion, as now called for in amended Claim 21.

In addition, as now amended, Claim 21 provides for a thermal resistant protective tube between the feed reel and the melting/evaporating source and protection of the wire-shaped vapor-depositing material containing the vapor deposition controlling gas during the specified feeding of the wire, as shown in the drawings and described at page 12, lines 9-11, of the present specification, which is also not taught or suggested in Steube or Satoh.

The Satoh and Welsh disclosures do not cure the defects of Steube. There is no teaching or suggestion of the arrangement of the wire reel and feeding of wire from the reel through a thermal resistant tube to a melting/evaporating source as specified in Applicants' claim.

In view of the present amendment to Claim 21 and the above remarks, Claims 21, 14 and 15 are believed to be definite and patentable over the prior art.

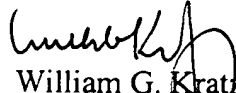
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicant's undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. 10/615,381  
Reply to OA dated June 15, 2006

In the event that this paper is not timely filed, the applicant respectfully petitions for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,  
HANSON & BROOKS, LLP



William G. Kratz, Jr.  
Attorney for Applicant  
Reg. No. 22,631

WGK/bak

Atty. Docket No. 000593B  
Suite 1000, 1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



23850

PATENT TRADEMARK OFFICE